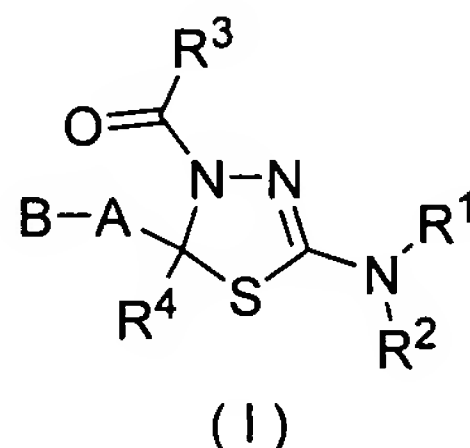


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A thiadiazoline derivative represented by the general formula (I), or a pharmacologically acceptable salt thereof:



<wherein,

R<sup>1</sup> represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl,

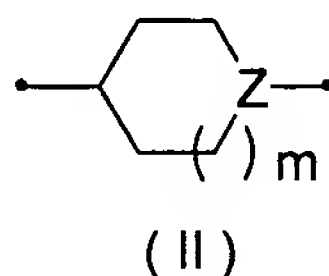
R<sup>2</sup> represents a hydrogen atom, or -COR<sup>5</sup> (wherein R<sup>5</sup> represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl), or

$R^1$  and  $R^2$  are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

$R^3$  represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl,

$R^4$  represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group,

A represents  $-(CH_2)_n-$  (wherein n represents an integer of 1 to 6), or a group of the formula (II)



(wherein m represents an integer of 0 to 2, and Z represents CH or a nitrogen atom capable of binding to B), and

(i) when A is  $-(CH_2)_n-$ , and n is 1 or 2,

B represents  $-NR^6R^7$  {wherein  $R^6$  represents a hydrogen atom, or lower alkyl,  $R^7$  represents substituted lower alkyl,  $-COR^8$  [wherein  $R^8$  represents substituted lower alkyl (provided that  $R^8$  is not trifluoromethyl), substituted lower alkoxy, substituted or unsubstituted aryloxy, a substituted or unsubstituted heterocyclic group, or

$-NR^9R^{10}$  (wherein  $R^9$  and  $R^{10}$  are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or  $R^9$  and  $R^{10}$  are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)], or  $R^6$  and  $R^7$  are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group},

-OR<sup>11</sup> (wherein  $R^{11}$  represents substituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted lower alkylcarbamoyl, substituted or unsubstituted di-(lower alkyl)carbamoyl, or substituted or unsubstituted heterocyclylcarbonyl),

-SR<sup>12</sup> (wherein  $R^{12}$  has the same meaning as that of the aforementioned  $R^{11}$ ), or

CH=NR<sup>13</sup> (wherein  $R^{13}$  represents hydroxy, or substituted or unsubstituted lower alkoxy),

(ii) when A is  $-(CH_2)_n-$ , and n is an integer of 3 to 6 ,

B represents -NR<sup>14</sup>R<sup>15</sup> {wherein  $R^{14}$  and  $R^{15}$  are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -COR<sup>16</sup> [wherein  $R^{16}$  represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or

unsubstituted aryl, a substituted or unsubstituted heterocyclic group,  
 substituted or unsubstituted lower alkoxy, substituted or unsubstituted  
 aryloxy, or  $-NR^{17}R^{18}$  (wherein  $R^{17}$  and  $R^{18}$  are the same or different, and  
 represent a hydrogen atom, substituted or unsubstituted lower alkyl,  
 substituted or unsubstituted lower alkenyl, substituted or unsubstituted  
 lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or  
 unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or  
 $R^{17}$  and  $R^{18}$  are combined together with the adjacent nitrogen atom to form  
 a substituted or unsubstituted heterocyclic group)], or  $-SO_2R^{19}$  [wherein  $R^{19}$   
 represents substituted or unsubstituted lower alkyl, substituted or  
 unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl,  
 substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a  
 substituted or unsubstituted heterocyclic group, or  $-NR^{20}R^{21}$  (wherein  $R^{20}$   
 and  $R^{21}$  are the same or different, and represent a hydrogen atom,  
 substituted or unsubstituted lower alkyl, substituted or unsubstituted lower  
 alkenyl, substituted or unsubstituted lower alkynyl, or substituted or  
 unsubstituted cycloalkyl, or  $R^{20}$  and  $R^{21}$  are combined together with the  
 adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic  
 group)], or  $R^{14}$  and  $R^{15}$  are combined together with the adjacent nitrogen  
 atom to form a substituted or unsubstituted heterocyclic group},  
 $-OR^{22}$  (wherein  $R^{22}$  has the same meaning as that of the aforementioned  
 $R^{11}$ ),

-SR<sup>23</sup> (wherein R<sup>23</sup> has the same meaning as that of the aforementioned R<sup>11</sup>), or

-CH=NR<sup>24</sup> (wherein R<sup>24</sup> has the same meaning as that of the aforementioned R<sup>13</sup>),

(iii) when A is a group of the formula (II),

B represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted lower alkoxycarbonyl, or substituted or unsubstituted lower alkylsulfonyl>.

2. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1, wherein R<sup>1</sup> is a hydrogen atom, or lower alkyl.

3. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 or 2, wherein R<sup>2</sup> is -COR<sup>5</sup> (wherein R<sup>5</sup> has the same meaning as that mentioned above).

4. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 3, wherein R<sup>5</sup> is lower alkyl.

5. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 3, wherein  $R^5$  is tert-butyl.

6. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 5~~, wherein  $R^3$  is lower alkyl.

7. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 5~~, wherein  $R^3$  is tert-butyl.

8. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 7~~, wherein  $R^4$  is substituted or unsubstituted aryl.

9. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 7~~, wherein  $R^4$  is phenyl.

10. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 9~~, wherein A is  $-(CH_2)_n-$  (wherein n has the same meaning as that mentioned above).

11. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is 1 or 2.

12. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 11, wherein B is  $-NR^6R^7$  (wherein  $R^6$  and  $R^7$  have the same meanings as those mentioned above, respectively).

13. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12, wherein  $R^6$  is a hydrogen atom.

14. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12 ~~or 13~~, wherein  $R^7$  is  $-COR^8$  (wherein  $R^8$  has the same meaning as that mentioned above).

15. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12, wherein  $R^6$  and  $R^7$  are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group.

16. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is an integer of 3 to 6.

17. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is 3.

18. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 16 ~~or 17~~, wherein B is  $-NR^{14}R^{15}$  (wherein  $R^{14}$  and  $R^{15}$  have the same meanings as those mentioned above, respectively).

19. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18, wherein  $R^{14}$  is a hydrogen atom.

20. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 ~~or 19~~, wherein  $R^{15}$  is substituted or unsubstituted lower alkyl.



21. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 ~~or 19~~, wherein  $R^{15}$  is  $-COR^{16}$  (wherein  $R^{16}$  has the same meaning as that mentioned above).

22. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 21, wherein  $R^{16}$  is a substituted or unsubstituted heterocyclic group.

23. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 21, wherein  $R^{16}$  is  $-NR^{17}R^{18}$  (wherein  $R^{17}$  and  $R^{18}$  have the same meanings as those mentioned above, respectively).

24. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 ~~or 19~~, wherein  $R^{15}$  is  $-SO_2R^{19}$  (wherein  $R^{19}$  has the same meaning as that mentioned above).

25. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 9~~, wherein A is a group of the formula (II).

26. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 25, wherein Z is a nitrogen atom.

27. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 25 ~~or 26~~, wherein B is a hydrogen atom, or substituted or unsubstituted lower alkyl.

28. (Currently Amended) A pharmaceutical composition which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

29. (Currently Amended) A mitotic kinesin Eg5 inhibitor which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

30. (Currently Amended) An antitumor agent which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

31. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~.

32. (Currently Amended) A method for therapeutic treatment of a malignant tumor which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~.

33. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ for the manufacture of a mitotic kinesin Eg5 inhibitor.

34. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ for the manufacture of the antitumor agent.